FUKUTA et al.
Serial No. 09/932,026

REMARKS

Reexamination of the captioned application is respectfully requested.

A. SUMMARY OF THIS AMENDMENT

By the current amendment, Applicants basically:

1. Request Withdrawal of the Finality of the December 8, 2003 final Office Action (see §B below).
2. Editorially amend the specification (see §C below).
3. Amend claims 16-18 (see §E below) .
4. Remind the Examiner of the November 26, 2003 IDS and request initialization of the PTO-1449 (see §D below) .
5. Respectfully traverse all prior art rejections (see §E below).

B. REQUEST FOR WITHDRAWAL OF FINALITY OF THE DEC 8, 2003 OFFICE ACTION

In the September 9, 2003 amendment Applicants canceled the original independent claims 1 to 4 and 13, and in lieu thereof added the new independent claims 16 to 20. Applicants specifically argued only one point in the September 9, 2003 amendment: that an end portion of the flexible substrate is pre-folded. But this prefold feature was, in reality, claimed in the original claims 1 to 4 and 13 against which the first final Office Action was directed.

Therefore, the addition of the new claims in the September 9, 2003 amendment did not prompt a new rejection, for essentially the same claim subject matter was at issue as was previously in the original claims. Therefore, the new ground of rejection formulated in the pending office action is not necessitated by the claim amendment. Accordingly, the finality of the December 8, 2003 rejection should be withdrawn.

C. AMENDMENTS TO SPECIFICATION

The September 9, 2003 Amendment incorrectly requested an amendment to page 17, line 16, to page 17, line 25 of the specification. The requested amendment should instead have been to page 13, line 13, to page 13, line 21.

By the current amendment, the proper amendment is indeed implemented for page 13, line 13, to page 13, line 21. In addition, page 17, line 16, to page 17, line 25 of the specification is returned to its usual form.

D. REMINDER OF NOV 26, 2003 IDS

Apparently the Information Disclosure Statement filed on November 26, 2003 (based on the Korean office action) did not reach the Examiner prior to formulation or mailing of the December 8, 2003 final office action. As a precaution, Applicants call the filing of the November 26, 2003 Information Disclosure Statement to the Examiner's attention and request initialization of the references cited on the PTO-1449.

E. PATENTABILITY OF THE CLAIMS

Independent claim 16 has been amended commensurate with independent claims 17 and 20 to state that at least one end portion of said flexible substrate has the external connection terminals and is folded almost in contact with a back surface of said flexible substrate.

Independent claim 17 has been amended editorially in a way not related to overcoming prior art.

Independent claim 18 has been amended editorially to correct a spelling error and to clarify that he member to be connected and the printed wiring substrate are provided below the flexible substrate. These amendments are not related to overcoming prior art.

F. PATENTABILITY OF THE CLAIMS

Claims 5, 6 and 16-20 stand rejected under 35 USC 103(a) as being unpatentable over U.S. Patent 5,963,287 to Asada et al in further view of U.S. Patent 5,461,202 to Sera et al. All prior art rejections are respectfully traversed.

Significantly, the Examiner admits that U.S. Patent 5,963,287 to Asada et al does not disclose "folding the flexible circuit board back towards the back surface" (see the second full paragraph after the boldface rejection on page 2 of the office action).

The Examiner points to Fig. 10(a) of U.S. Patent 5,461,202 to Sera et al. as teaching the bending of the end of a flexible film around a reinforcement plate 37a, and alleges that the reinforcement plate acts as a spacer. Based on U.S. Patent 5,461,202 to Sera et al., the Examiner concludes that it would have been obvious to one of ordinary skill in the art to bend the end of a flexible circuit board as shown by U.S. Patent 5,461,202 to Sera et al. to provide a flexible circuit board which can be easily mounted on a printed circuit board.

Applicants respectfully traverse this and all prior art rejections with respect to all pending claims.

Independent claim 17 concludes with the further distinctive language that "the folded end portions are connectible to a member to be connected provided over the front surface of said flexible substrate". Even if combination with Sera were possible and were suggested (which Applicants do *not* admit), and if an end portion of flexible printed circuit board 17 of Asada were folded over in the manner of Sera, the folded over end portion would not be connectable to Asada's input electrode 9. Rather, such a folded over end portion of Asada's flexible printed circuit board 17 would be oriented facing toward the top of Fig. 3, while the input electrode 9 remains in an opposite orientation --

beneath flexible printed circuit board 17!. Further, in this sense, Asada's input electrode 9 is *not provided "over"* the front surface of flexible printed circuit board 17.

Similarly, independent claim 20 and amended independent claim 16 specify that the end portion has the external connection terminals and is folded back. If only the folded over end portion of Asada's flexible printed circuit board 17 bore the external connection terminals, then there would be no connection to Asada's electrode 9. Therefore, these claims are not taught or suggested by the incorrectly postulated combination.

Neither Asada et al. (U.S. 5,963,287) nor Sera et al. (U.S. 5,461,202) disclose or suggest that the folded portion of the flexible substrate is connected with the printed wiring substrate and the like. Figs. 9 and 10 of Sera et al. disclose arrangements in which the end portion of the flexible wiring board is connected with the land 39 of the printed circuit board 38. In Fig. 9 of Sera et al., a bent portion of (i) the printed conductive circuit layer 34 and (ii) the metallic layer 32, the bent portion being bent by 90°, is connected with the land 39 by the solder 40. In Fig. 10 of Sera et al., the bent portion of (i) the printed conductive circuit layer 34 and (ii) the metallic layer 32, the bent portion being bent by 90°, is connected with the land 39 by the solder 40, and such a portion of (i) the printed conductive circuit layer 34 and (ii) the metallic layer 32 the portion being a preceding portion of the bent portion, is connected with the land 39.

Sera et al. neither discloses nor suggests an arrangement in which the folded portion (i.e. a folded flat portion of the flexible wiring substrate, the folded flat portion being bent by 180°) is connected with the printed wiring substrate.

Therefore, the Examiner has ample basis for withdrawing all prior art rejections and allowing all claims.

E. MISCELLANEOUS

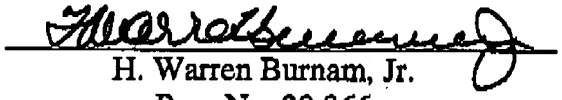
In view of the foregoing and other considerations, a formal indication of allowance is earnestly solicited.

The Commissioner is authorized to charge the undersigned's deposit account #14-1140 in whatever amount is necessary for entry of these papers and the continued pendency of the captioned application.

Should the Examiner feel that an interview with the undersigned would facilitate allowance of this application, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: 
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